

PEEK FITTINGS

NOTES

The following information applies to the data provided in the Comprehensive Performance Test Report.

Pull-off strength: Refers to the force that the tube comes off when it is connected to the receiving port.

Test method: Install and tighten the fitting-tube assembly into the torque fixture. Increase the torque until the tube comes off.

Pressure values: The pressure values we provide are all safety pressures, which is 70% of the critical pressure at which the tube or joint starts to leak under the pressure test.

Test method: Bubble leak test to evaluate critical pressure value.

Deformation Degree: Deformed Tubing ID ÷ Initial Tubing ID

Unless otherwise specified, all tests refer to fittings are done with water at room temperature. Results may vary depending on connecting port, tube material, tube diameter (tolerances), temperature and solvent used. **Data is for reference only.**

MATERIAL CHARACTERISTICS

PEEK High-performance thermoplastic material, 30% carbon fiber reinforced polyacrylate ketone (PEEK). Suitable for applications requiring higher strength and stiffness in static or dynamic systems. Good wear resistance, low coefficient of friction, low coefficient of thermal expansion and chemical resistance to corrosive environments.

Applicable temperature range: -100°C ~ 250°C

PTFE Polytetrafluoroethylene, with typical excellent properties of gas plastic resin. It has good tensile properties, chemical resistance and low friction.

Applicable temperature range: -50°C ~ 100°C

PFA Copolymer made from a small amount of heptafluoropropyl trifluorovinyl ether and polytetrafluoroethylene. Melt bonding is improved while solution viscosity is reduced and there is no change in performance compared to polytetrafluoroethylene.

Applicable temperature range: -50°C ~ 100°C

ETFE It is a fluoropolymer with hydrolysis stability and weather resistance, excellent wear resistance and chemical resistance.

Applicable temperature range: -80°C ~ 150°C

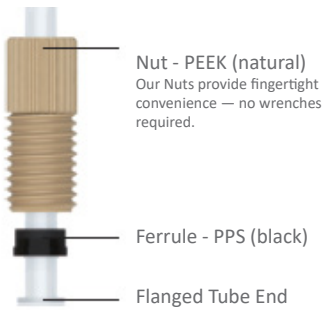


PEEK FLANGED FITTINGS - TWO-PIECE SET

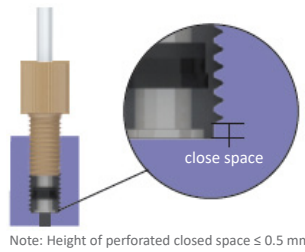
Thread 1/4-28 UNF | M6



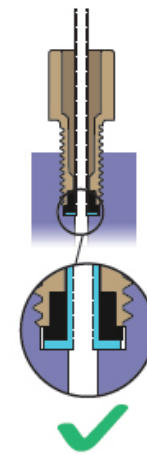
- Traditional flat-bottomed fitting.
- The deformed tube end is compressed in the thread by the ferrule and the PEEK connector, so that an airtight connection is achieved.
- No change in tube diameter.
- No effect on flow rate.
- More stable flow rate.
- Can be disassembled repeatedly without affecting its sealing.
- Long-term working temperature range: -50°C to +150°C.
- Thread: 1/4-28 UNF flat bottom, M6.



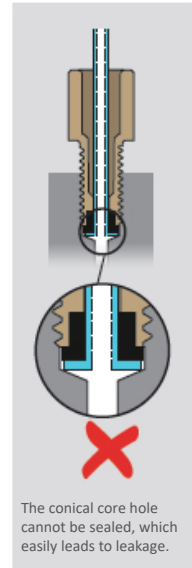
- Make sure the ferrule is oriented correctly! The narrow end of the ferrule should towards the nut.
- Flange the tubing with exclusive flange tools, flanged tube end $\leq \Phi 5$ mm.



Note: Height of perforated closed space ≤ 0.5 mm



Thread core hole port needs to be flat.



The conical core hole cannot be sealed, which easily leads to leakage.

Application Note

Step 1. Flange the tubing with exclusive flange tools, tubing can be flanged one end or both two ends, depending on specific application requirements.

Step 2. When tubing flanged in two ends, 2 pieces clips and 2 pieces nuts need to be slid into the tubing before both ends flanged; when tubing flanged in one end, 1 piece clip and 1 piece nut can be slid into tubing before or after the one end flanged.

Step 3. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 4. Finger tighten the fittings into the port until snug.

Step 5. After several uses (especially at high pressure) the flanged tube should be replaced.

Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200001-PS-BK	1.6 mm	Black	PPS
B-RP-200002-PS-BK	2.0 mm	Black	PPS

Ferrule for 1.6 mm | 2.0 mm O.D. tube

Unit: mm



Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200003-PS-BK	2.5 mm	Black	PPS
B-RP-200004-PS-BK	3.0 / 3.2 mm	Black	PPS

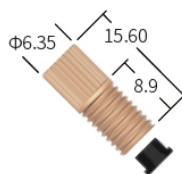
Ferrule for 2.5 mm | 3.0 / 3.2 mm O.D. tube

Unit: mm



Compact Flangeless Nut with Ferrule Two-piece set

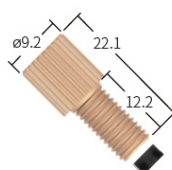
Unit: mm



Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-100001	1/4-28 UNF	1.6 mm	2.00 kgf	67.4 bar (977 psi)	PEEK+PPS
B-RP-100002	1/4-28 UNF	2.0 mm	2.79 kgf	73.5 bar (1066 psi)	PEEK+PPS
B-RP-100005	1/4-28 UNF	2.5 mm	3.48 kgf	43.9 bar (636 psi)	PEEK+PPS
B-RP-100006	1/4-28 UNF	3.0 / 3.2 mm	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS
B-RP-100009	M6	1.6 mm	1.38 kgf	72.1 bar (1045 psi)	PEEK+PPS
B-RP-100010	M6	2.0 mm	2.69 kgf	84.5 bar (1225 psi)	PEEK+PPS

Flangeless Nut with Ferrule Two-piece set

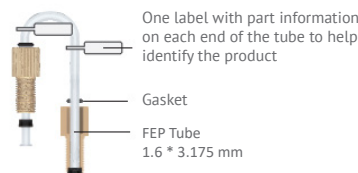
Unit: mm



Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-100003	1/4-28 UNF	1.6 mm	2.63 kgf	67.4 bar (977psi)	PEEK+PPS
B-RP-100004	1/4-28 UNF	2.0 mm	2.68 kgf	47.4 bar (687 psi)	PEEK+PPS
B-RP-100007	1/4-28 UNF	2.5 mm	2.44 kgf	47.6 bar (690 psi)	PEEK+PPS
B-RP-100008	1/4-28 UNF	3.0 / 3.2 mm	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS
B-RP-100011	M6	1.6 mm	2.20 kgf	73.7 bar (1068 psi)	PEEK+PPS
B-RP-100012	M6	2.0 mm	2.54 kgf	54.0 bar (783 psi)	PEEK+PPS

Compact Flangeless Nut with Ferrule & Tube FEP

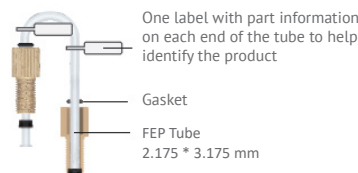
Unit: mm



Product No.	Thread	Tubing Size I.D. * O.D.	Tube length	Pull-off Strength	Pressure Rating	Material
B-RP-101006	1/4-28 UNF	1.6 mm * 3.175 mm	0.2 m	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS+FEP
B-RP-101007	1/4-28 UNF	1.6 mm * 3.175 mm	0.3 m	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS+FEP
B-RP-101008	1/4-28 UNF	1.6 mm * 3.175 mm	0.5 m	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS+FEP
B-RP-101009	1/4-28 UNF	1.6 mm * 3.175 mm	1.0 m	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS+FEP
B-RP-101010	1/4-28 UNF	1.6 mm * 3.175 mm	2.0 m	6.11 kgf	34.6 bar (501 psi)	PEEK+PPS+FEP

Flangeless Nut with Ferrule & Tube FEP

Unit: mm



Product No.	Thread	Tubing Size I.D. * O.D.	Tube length	Pull-off Strength	Pressure Rating	Material
B-RP-101001	1/4-28 UNF	2.175 mm * 3.175 mm	0.2 m	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS+FEP
B-RP-101002	1/4-28 UNF	2.175 mm * 3.175 mm	0.3 m	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS+FEP
B-RP-101003	1/4-28 UNF	2.175 mm * 3.175 mm	0.5 m	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS+FEP
B-RP-101004	1/4-28 UNF	2.175 mm * 3.175 mm	1.0 m	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS+FEP
B-RP-101005	1/4-28 UNF	2.175 mm * 3.175 mm	2.0 m	5.60 kgf	42.7 bar (619 psi)	PEEK+PPS+FEP

Note: Please contact us if you need a customized tube-fitting assembly.

PEEK FLANGELESS FITTINGS - TWO-PIECE SET

Thread 1/4-28 UNF | M6



- Standard fittings with straight threads.
- Tool-free assembly - simply slip the nut and ferrule on the tube, screwing them into the tube.
- Need to use with ETFE ferrule.
- Long-term working temperature range: -80°C ~ +150°C.
- Used for standard rigid tubing OD 1.6/2.0/2.5/3.0/3.2 mm, easy and fast installation.
- Thread: 1/4-28 UNF flat bottom, M6.



- Make sure the ferrule is oriented correctly! The narrow end of the ferrule should towards the nut.

Application Note

Step 1. Slide the PEEK nut, followed by the ETFE ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 3. Finger tighten the fittings into the port until snug.

Step 4. After several uses (especially at high pressure) the ferrules should be replaced.

Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200012-ET-YE	1.6 mm	Yellow	ETFE
B-RP-200011-ET-YE	2.0 mm	Yellow	ETFE

Ferrule for 1.6 mm | 2.0 mm O.D. tube

Unit: mm



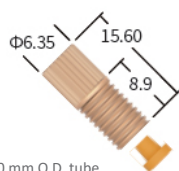
Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200013-ET-YE	2.5 mm	Yellow	ETFE
B-RP-200014-ET-YE	3.0 mm	Yellow	ETFE
B-RP-200015-ET-YE	3.2 mm	Yellow	ETFE

Ferrule for 2.5 | 3.0 | 3.2 mm O.D. tube

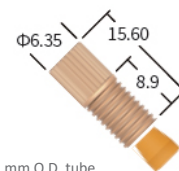
Unit: mm



Compact Flangeless Nut with Ferrule
Two-piece set



For 1.6 mm, 2.0 mm O.D. tube

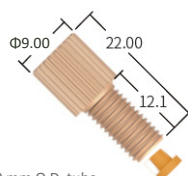


For 2.5 mm, 3.0 mm & 3.5 mm O.D. tube

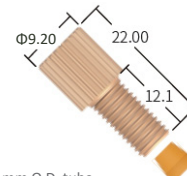
Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-103005	1/4-28 UNF	1.6 mm	1.86 kgf	59.6 bar (864 psi)	0.9	PEEK+ETFE
B-RP-103004	1/4-28 UNF	2.0 mm	1.94 kgf	68.7 bar (996 psi)	0.76	PEEK+ETFE
B-RP-103003	1/4-28 UNF	2.5 mm	2.92 kgf	46.7 bar (677 psi)	0.867	PEEK+ETFE
B-RP-103002	1/4-28 UNF	3.0 mm	4.05 kgf	41.2 bar (597 psi)	0.83	PEEK+ETFE
B-RP-103001	1/4-28 UNF	3.2 mm	4.05 kgf	63.3 bar (918 psi)	0.74	PEEK+ETFE
B-RP-103011	M6	1.6 mm	2.21 kgf	63.6 bar (922 psi)	0.8	PEEK+ETFE
B-RP-103012	M6	2.0 mm	2.74 kgf	66.9 bar (970 psi)	0.73	PEEK+ETFE
B-RP-103013	M6	2.5 mm	3.49 kgf	37.5 bar (543 psi)	0.82	PEEK+ETFE
B-RP-103014	M6	3.0 mm	4.29 kgf	34.5 bar (500 psi)	0.8	PEEK+ETFE
B-RP-103015	M6	3.2 mm	3.91 kgf	51.9 bar (752 psi)	0.74	PEEK+ETFE

Flangeless Nut with Ferrule
Two-piece set



For 1.6 mm, 2.0 mm O.D. tube

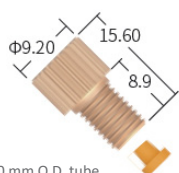


For 2.5 mm, 3.0 mm & 3.5 mm O.D. tube

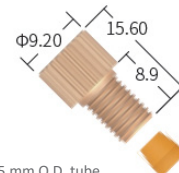
Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-103025	1/4-28 UNF	1.6 mm	1.93 kgf	67.3 bar (976 psi)	0.79	PEEK+ETFE
B-RP-103026	1/4-28 UNF	2.0 mm	2.02 kgf	68.7 bar (996 psi)	0.85	PEEK+ETFE
B-RP-103008	1/4-28 UNF	2.5 mm	3.41 kgf	47 bar (681 psi)	0.8	PEEK+ETFE
B-RP-103009	1/4-28 UNF	3.0 mm	3.48 kgf	37.1 bar (538 psi)	0.8	PEEK+ETFE
B-RP-103010	1/4-28 UNF	3.2 mm	3.94 kgf	53.3 bar (773 psi)	0.72	PEEK+ETFE
B-RP-103006	M6	1.6 mm	2.39 kgf	66.6 bar (965 psi)	0.73	PEEK+ETFE
B-RP-103007	M6	2.0 mm	1.80 kgf	71.4 bar (1035 psi)	0.73	PEEK+ETFE
B-RP-103022	M6	2.5 mm	3.34 kgf	51.3 bar (744 psi)	0.7	PEEK+ETFE
B-RP-103023	M6	3.0 mm	3.84 kgf	37.2 bar (539 psi)	0.82	PEEK+ETFE
B-RP-103024	M6	3.2 mm	4.14 kgf	51.9 bar (752 psi)	0.72	PEEK+ETFE

Short Flangeless Nut with Ferrule
Two-piece set



For 1.6 mm, 2.0 mm O.D. tube



For 2.5 mm, 3.0 mm & 3.5 mm O.D. tube

Unit: mm

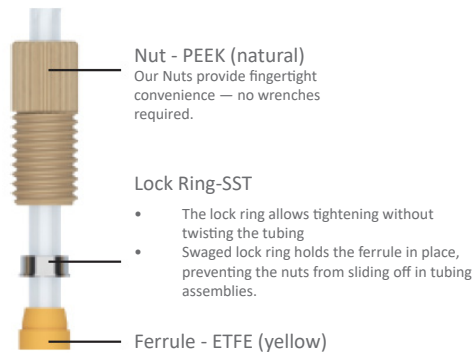
Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-103027	1/4-28 UNF	1.6 mm	1.34 kgf	70.6 bar (1023 psi)	0.84	PEEK+ETFE
B-RP-103028	1/4-28 UNF	2.0 mm	2.65 kgf	73.3 bar (1063 psi)	0.73	PEEK+ETFE
B-RP-103016	1/4-28 UNF	2.5 mm	3.61 kgf	38.2 bar (554 psi)	0.77	PEEK+ETFE
B-RP-103017	1/4-28 UNF	3.0 mm	3.85 kgf	39.5 bar (572 psi)	0.8	PEEK+ETFE
B-RP-103018	1/4-28 UNF	3.2 mm	4.43 kgf	50.8 bar (736 psi)	0.72	PEEK+ETFE
B-RP-103029	M6	1.6 mm	2.14 kgf	59.2 bar (858 psi)	0.75	PEEK+ETFE
B-RP-103030	M6	2.0 mm	2.21 kgf	71.5 bar (1037 psi)	0.8	PEEK+ETFE
B-RP-103019	M6	2.5 mm	3.43 kgf	41.8 bar (606 psi)	0.78	PEEK+ETFE
B-RP-103020	M6	3.0 mm	4.07 kgf	39.4 bar (571 psi)	0.76	PEEK+ETFE
B-RP-103021	M6	3.2 mm	4.04 kgf	50.8 bar (736 psi)	0.72	PEEK+ETFE

PEEK FLANGELESS FITTINGS - THREE-PIECE SET

Thread 1/4-28 UNF | M6



- Standard fittings with straight threads.
- Tool-free assembly - simply slip the nut and ferrule on the tube, screwing them into the tube.
- Need to use with ETFE ferrule.
- With stainless steel sleeve, the rigid tube does not follow the rotation during screwing the nut.
- Efficiently elimination of loose fittings in the tube resulting from twisting.
- This type of fitting is well-suited for pre-assembled tubing and situations where frequent disconnections are necessary.
- Long-term working temperature range: -80°C ~ +150°C.
- Used for standard rigid tubing OD 1.6/2.0/2.5/3.0/3.2 mm, easy and fast installation.
- Thread: 1/4-28 UNF flat bottom, M6.



- Make sure the locking ring is oriented correctly!
- The flattened end of the ring should face towards the nut with the narrow end of the ferrule towards the ring.

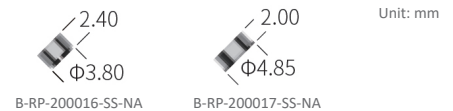
Application Note

Step 1. Slide the PEEK nut, followed by the 316 SST sleeve and ETFE ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

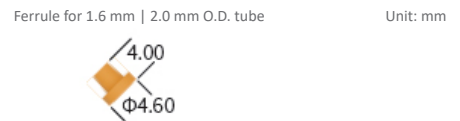
Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 3. Finger tighten the fittings into the port until snug.

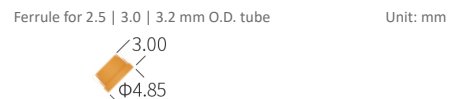
Lock Ring No.	Tubing Size O.D.	Material
B-RP-200016-SS-NA	1.6 mm 2.0 mm	SUS316
B-RP-200017-SS-NA	2.5 mm 3.0 mm 3.2 mm	SUS316



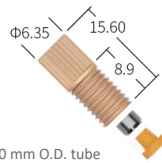
Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200012-ET-YE	1.6 mm	Yellow	ETFE
B-RP-200011-ET-YE	2.0 mm	Yellow	ETFE



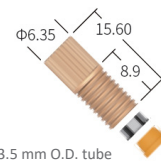
Ferrule No.	Tubing Size O.D.	Color	Material
B-RP-200008-ET-YE	2.5 mm	Yellow	ETFE
B-RP-200009-ET-YE	3.0 mm	Yellow	ETFE
B-RP-200010-ET-YE	3.2 mm	Yellow	ETFE



Compact Flangeless Nut with Ferrule Three-piece set



For 1.6 mm, 2.0 mm O.D. tube

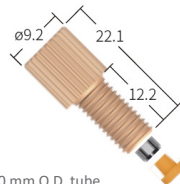


For 2.5 mm, 3.0 mm & 3.5 mm O.D. tube

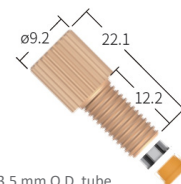
Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-102001	1/4-28 UNF	1.6 mm	2.17 kgf	70.6 bar (1023 psi)	0.76	PEEK+ETFE+SU316
B-RP-102002	1/4-28 UNF	2.0 mm	3.01 kgf	75.3 bar (1092 psi)	0.7	PEEK+ETFE+SU316
B-RP-102003	1/4-28 UNF	2.5 mm	3.89 kgf	47 bar (681 psi)	0.91	PEEK+ETFE+SU316
B-RP-102004	1/4-28 UNF	3.0 mm	3.89 kgf	40.9 bar (593 psi)	0.93	PEEK+ETFE+SU316
B-RP-102005	1/4-28 UNF	3.2 mm	5.69 kgf	48.3 bar (700 psi)	0.79	PEEK+ETFE+SU316
B-RP-102011	M6	1.6 mm	2.43 kgf	71.1 bar (1031 psi)	0.788	PEEK+ETFE+SU316
B-RP-102012	M6	2.0 mm	3.05 kgf	79.2 bar (1148 psi)	0.67	PEEK+ETFE+SU316

Flangeless Nut with Ferrule Three-piece set



For 1.6 mm, 2.0 mm O.D. tube



For 2.5 mm, 3.0 mm & 3.5 mm O.D. tube

Unit: mm

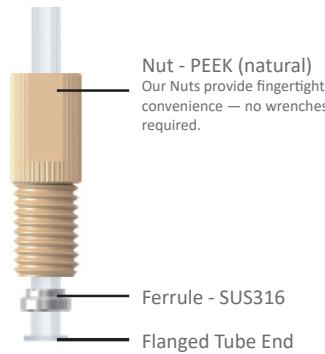
Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-102006	1/4-28 UNF	1.6 mm	2.85 kgf	74.9 bar (1086 psi)	0.788	PEEK+ETFE+SU316
B-RP-102007	1/4-28 UNF	2.0 mm	2.74 kgf	63.3 bar (918 psi)	0.73	PEEK+ETFE+SU316
B-RP-102008	1/4-28 UNF	2.5 mm	2.78 kgf	49.5 bar (717 psi)	0.77	PEEK+ETFE+SU316
B-RP-102009	1/4-28 UNF	3.0 mm	3.99 kgf	36.8 bar (533 psi)	0.81	PEEK+ETFE+SU316
B-RP-102010	1/4-28 UNF	3.2 mm	5.69 kgf	50.5 bar (732 psi)	0.769	PEEK+ETFE+SU316
B-RP-102013	M6	1.6 mm	2.86 kgf	72.2 bar (1047 psi)	0.75	PEEK+ETFE+SU316
B-RP-102014	M6	2.0 mm	3.05 kgf	76 bar (1102 psi)	0.72	PEEK+ETFE+SU316

ULTRA MINI PEEK FLANGED FITTINGS - TWO-PIECE SET

Thread 6-40 UNF



- Ultra compact flat-bottomed fitting.
- The deformed tube end is compressed in the thread by the ferrule and the PEEK connector, so that an airtight connection is achieved.
- No change in tube diameter.
- No effect on flow rate.
- More stable flow rate.
- Can be disassembled repeatedly without affecting its sealing.
- Long-term working temperature range: -80°C to +220°C.
- Used for standard rigid tubing O.D. 1.6 mm, easy and fast installation.
- Thread: 6-40 UNF flat bottom.



- Make sure the ferrule is oriented correctly! The narrow end of the ferrule should towards the nut.
- Flange the tubing with exclusive flange tools, flanged tube end $\leq \Phi 2.5$ mm

Application Note

Step 1. Flange the tubing with exclusive flange tools, tubing can be flanged one end or both two ends, depending on specific application requirements.

Step 2. When tubing flanged in two ends, 2 pieces clips and 2 pieces nuts need to be slid into the tubing before both ends flanged; when tubing flanged in one end, 1 piece clip and 1 piece nut can be slid into tubing before or after the one end flanged.

Step 3. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 4. Finger tighten the fittings into the port until snug.

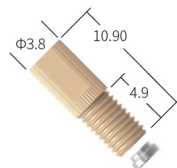
Step 5. After several uses (especially at high pressure) the flanged tube should be replace.

Ferrule No.	Tubing Size O.D.	Material
B-RP-200023-SS-NA	1.6 mm	SUS316



Unit: mm

Ultra Mini PEEK Flanged Fittings Two-piece set



Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-106002	6-40 UNF	1.6 mm	1.72 kgf	57.9 bar (839 psi)	PEEK+SUS316

ULTRA MINI PEEK FLANGELESS FITTINGS - THREE-PIECE SET

Thread 6-40 UNF



- Ultra compact flat-bottomed fitting.
- Tool-free assembly - simply slip the nut and ferrule on the tube, screwing them into the tube.
- Need to use with PEEK ferrule.
- With stainless steel sleeve, the rigid pipe does not follow the rotation during screwing the nut.
- Efficiently elimination of loose fittings in the tube resulting from twisting.
- This type of fitting is well-suited for pre-assembled tubing and situations where frequent disconnections are necessary.
- Long-term working temperature range: -80°C ~ +220°C.
- Used for standard rigid tubing O.D. 1.6 mm, easy and fast installation.
- Thread: 6-40 UNF flat bottom.

Nut - PEEK (natural)
Our Nuts provide fingertight convenience — no wrenches required.

Lock Ring-SST

- The lock ring allows tightening without twisting the tubing.
- Swaged lock ring holds the ferrule in place, preventing the nuts from sliding off in tubing assemblies.

Ferrule - PEEK (natural)

- Make sure the locking ring is oriented correctly! The flattened end of the ring should face towards the nut with the narrow end of the ferrule towards the ring.

Fig.1: Flangeless Fitting - Inner diameter deformation

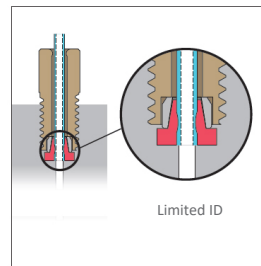
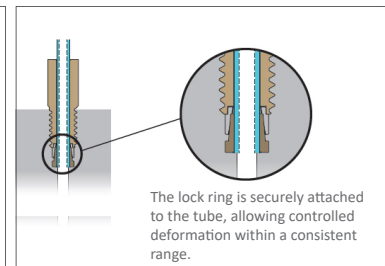


Fig.2: Ultra Mini Flangeless Fittings - No deformation of the inner diameter



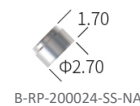
Application Note

Step 1. Slide the PEEK nut, followed by the 316 SST sleeve and ETFE ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

Step 3. Finger tighten the fittings into the port until snug.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Lock Ring No.	Tubing Size O.D.	Material
B-RP-200024-SS-NA	1.6 mm	SUS316



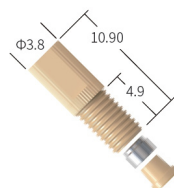
Unit: mm

Ferrule No.	Tubing Size O.D.	Material
B-RP-200027-PK-NA	1.6 mm	PEEK



Unit: mm

Ultra Mini PEEK Flanged Fittings Two-piece set



Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-107001	6-40 UNF	1.6 mm	2.75 kgf	47.9 bar (694 psi)	PEEK+SUS316

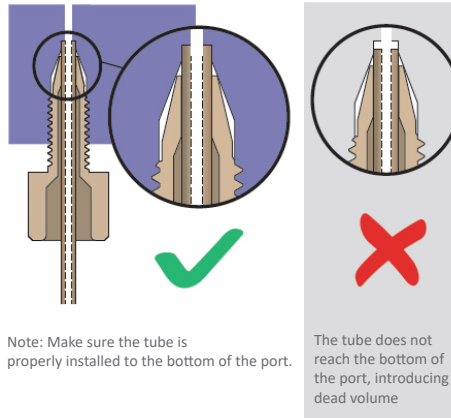
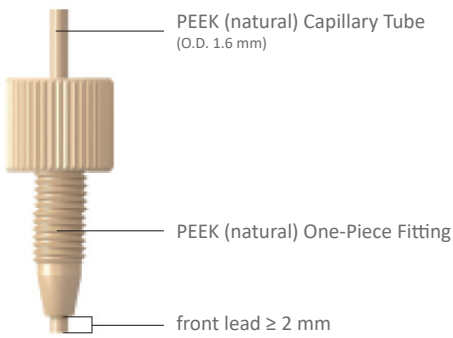
PEEK ONE-PIECE HAND TIGHTENING FITTINGS

Thread 10-32 UNF



- Original one-piece hand tightening fittings.
- Used for standard rigid tubing (PEEK/PTFE/ETFE/FEP) O.D. 1.6 mm.
- Long-term working temperature range: -100°C to +250°C.
- Thread: 10-32 UNF coned.

Application Note

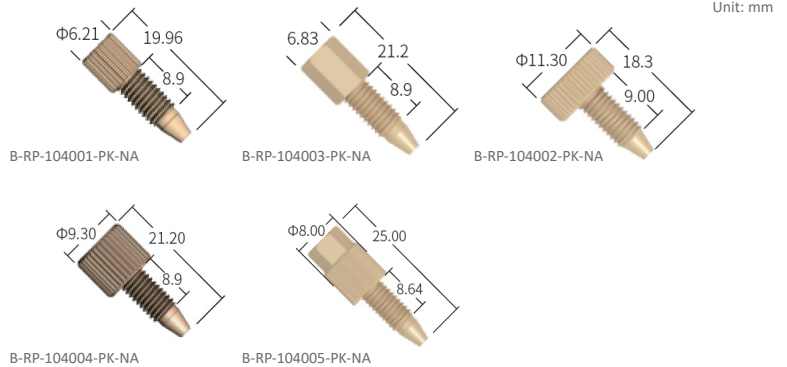


Note: Make sure the tube is properly installed to the bottom of the port.

The tube does not reach the bottom of the port, introducing dead volume

Note: Make sure the tube is properly installed to the bottom of the port

PEEK One-piece Hand Tightening Fittings



Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Deformation Degree	Material
B-RP-104001-PK-NA	10-32 UNF	1.6 mm	10.52 kgf	177.5 bar (2574 psi)	0.84	PEEK
B-RP-104003-PK-NA	10-32 UNF	1.6 mm	10.17 kgf	154.5 bar (2240 psi)	0.84	PEEK
B-RP-104002-PK-NA	10-32 UNF	1.6 mm	10.34 kgf	177.5 bar (2574 psi)	0.84	PEEK
B-RP-104004-PK-NA	10-32 UNF	1.6 mm	-	-	-	PEEK
B-RP-104005-PK-NA	10-32 UNF	1.6 mm	-	-	-	PEEK

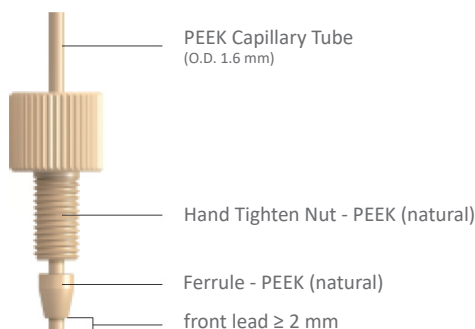
PEEK TWO-PIECE HAND TIGHTENING FITTINGS

Thread 10-32 UNF



- Two-piece design: Economical and practical - only need to replace the flangeless nut.
- Used for standard rigid tubing (PEEK/PTFE/ETFE/FEP) O.D. 1.6 mm.
- Long-term working temperature range: -100°C to +250°C
- Thread: 10-32 UNF coned.

Application Note



- Other installation considerations are the same as for PEEK one-piece fittings.

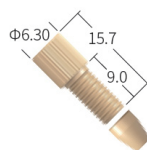
Ferrule No.	Tubing Size O.D.	Material
B-RP-200007-PK-NA	1.6 mm	PEEK



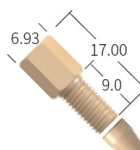
B-RP-200007-PK-NA

Unit: mm

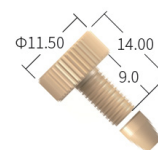
PEEK Two-Piece Hand Tightening Fittings



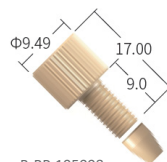
B-RP-105002



B-RP-105004



B-RP-105006



B-RP-105008

Unit: mm

Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-105002	10-32 UNF	1.6 mm	2.03 kgf	71 bar (1029 psi)	PEEK
B-RP-105004	10-32 UNF	1.6 mm	1.98 kgf	74 bar (1073 psi)	PEEK
B-RP-105006	10-32 UNF	1.6 mm	11.76 kgf	-	PEEK
B-RP-105008	10-32 UNF	1.6 mm	-	63 bar (913 psi)	PEEK

HIGH PRESSURE PEEK FITTINGS

Thread 10-32 UNF

01

PEEK FITTINGS

High Pressure PEEK Fingertight Fittings



- For tubes and capillaries with an outer diameter of 1.6 mm (1/16").
- For use in HPLC or GC for pressures up to 250 bar.
- Material: PEEK (Graphite processing).
- Thread: 10-32 UNF conical.

Product No.	Thread	Tubing Size O.D.	Operating Pressure	Color	Material
B-SC-100002-PK-BK	10-32 UNF	1.6 mm	250 bar (3625 psi)	Black	PEEK (Graphite)

High Pressure PEEK Fittings



- For tubes and capillaries with an outer diameter of 1.6 mm (1/16").
- For use in HPLC or GC for pressures up to 250 bar.
- Material: PEEK (Graphite processing).
- Thread: 10-32 UNF conical.

Product No.	Thread	Tubing Size O.D.	Operating Pressure	Color	Material
B-SC-100001-PK-BK	10-32 UNF	1.6 mm	250 bar (3625 psi)	Black	PEEK (Graphite)

High Pressure PEEK Fingertight Plugs

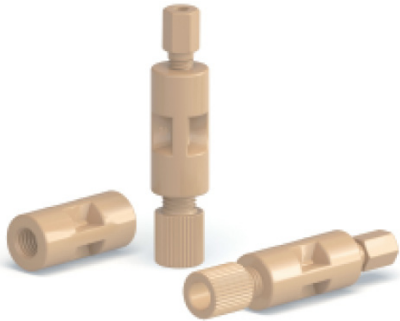


- For use in HPLC or GC for pressures up to 250 bar.
- Thread: 10-32 UNF conical.

Product No.	Thread	Tubing Size O.D.	Operating Pressure	Color	Material
B-SP-100001-PK-BK	10-32 UNF	1.6 mm	250 bar (3625 psi)	Black	PEEK (Graphite)

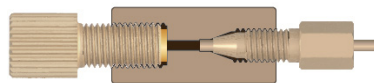
PEEK FEMALE THREAD STRAIGHT ADAPTER

Thread 1/4-28 UNF | 10-32 UNF

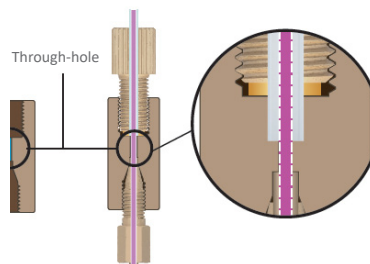


- Connecting two fittings with the same or different threads together.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

Application Note



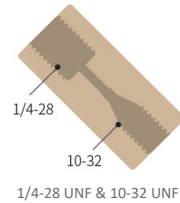
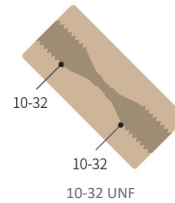
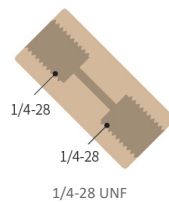
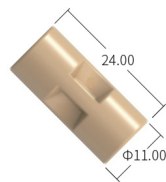
- 8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread
- No dead volume docking can be achieved when the diameter of the flow path is the same as the inner diameter of the tube.



The internal volume is shown in the figure for the volume of the threaded port connection channel.

PEEK Female Thread Straight Adapter

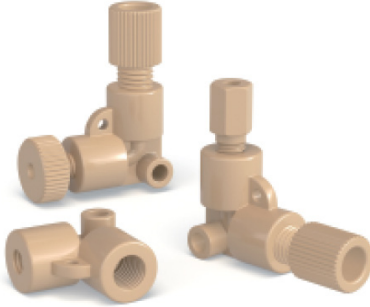
Unit: mm



Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-300003-PK-NA	1/4-28 UNF	0.8 mm	4.02 mm ³	PEEK
B-RP-300004-PK-NA	1/4-28 UNF	1.25 mm	9.82 mm ³	PEEK
B-RP-300005-PK-NA	1/4-28 UNF	2.0 mm	25.13 mm ³	PEEK
B-RP-300006-PK-NA	10-32 UNF	0.8 mm	0.94 mm ³	PEEK
B-RP-300007-PK-NA	10-32 UNF	1.25 mm	2.30 mm ³	PEEK
B-RP-300001-PK-NA	1/4-28 UNF & 10-32 UNF	0.8 mm	2.50 mm ³	PEEK
B-RP-300002-PK-NA	1/4-28 UNF & 10-32 UNF	1.25 mm	6.10 mm ³	PEEK

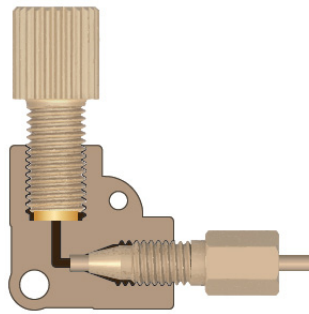
PEEK FEMALE THREAD ELBOW ADAPTER

Thread 1/4-28 UNF | 10-32 UNF



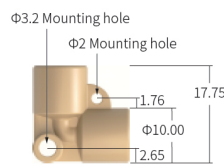
- Connecting two fittings with the same or different threads together.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

Application Note

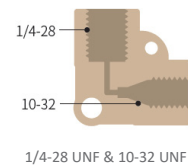
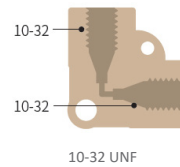
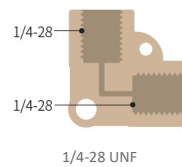


- 8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread

PEEK Female Thread Elbow Adapter



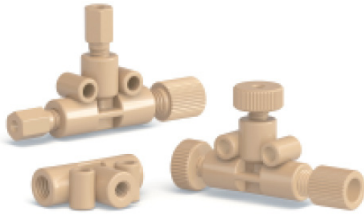
Unit: mm



Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-304001-PK-NA	1/4-28 UNF	0.8 mm	4.76 mm ³	PEEK
B-RP-304002-PK-NA	1/4-28 UNF	1.25 mm	11.77 mm ³	PEEK
B-RP-304003-PK-NA	1/4-28 UNF	2.0 mm	29.56 mm ³	PEEK
B-RP-304004-PK-NA	10-32 UNF	0.8 mm	1.68 mm ³	PEEK
B-RP-304005-PK-NA	10-32 UNF	1.25 mm	4.14 mm ³	PEEK
B-RP-304006-PK-NA	1/4-28 UNF & 10-32 UNF	0.8 mm	3.22 mm ³	PEEK
B-RP-304007-PK-NA	1/4-28 UNF & 10-32 UNF	1.25 mm	7.96 mm ³	PEEK

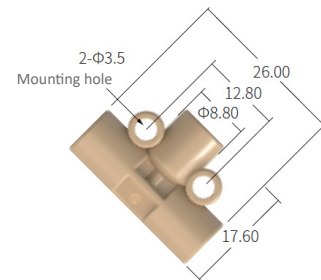
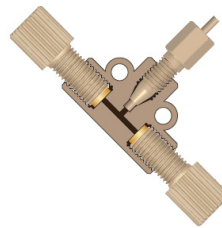
PEEK FEMALE THREAD T-ADAPTER

Thread 1/4-28 UNF | 10-32 UNF



- Connecting three fittings with the same or different threads together.
- Designed to separate a fluid or mix two fluids together.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

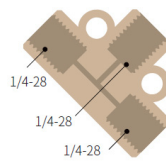
Application Note



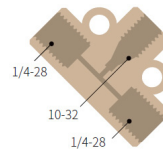
Unit: mm

8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread

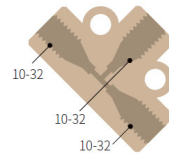
PEEK Female Thread T-Adapter



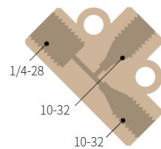
B-RP-301001-PK-NA
B-RP-301002-PK-NA
B-RP-301003-PK-NA



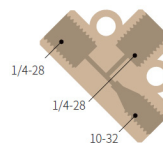
B-RP-301004-PK-NA
B-RP-301005-PK-NA



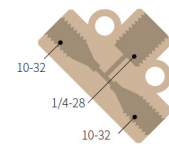
B-RP-301006-PK-NA
B-RP-301007-PK-NA



B-RP-301008-PK-NA
B-RP-301009-PK-NA



B-RP-301010-PK-NA
B-RP-301011-PK-NA

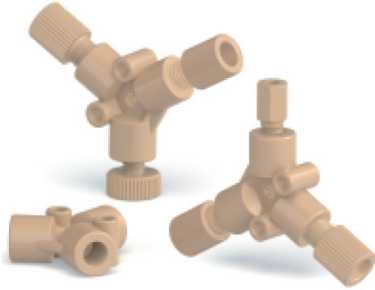


B-RP-301012-PK-NA
B-RP-301013-PK-NA

Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-301001-PK-NA	1/4-28 UNF (*3)	0.8 mm	7.47 mm ³	PEEK
B-RP-301002-PK-NA	1/4-28 UNF (*3)	1.25 mm	18.29 mm ³	PEEK
B-RP-301003-PK-NA	1/4-28 UNF (*3)	2.0 mm	45.09 mm ³	PEEK
B-RP-301004-PK-NA	1/4-28 UNF (*2) & 10-32 UNF	0.8 mm	5.94 mm ³	PEEK
B-RP-301005-PK-NA	1/4-28 UNF (*2) & 10-32 UNF	1.25 mm	14.48 mm ³	PEEK
B-RP-301006-PK-NA	10-32UNF (*3)	0.8 mm	2.87 mm ³	PEEK
B-RP-301007-PK-NA	10-32UNF (*3)	1.25 mm	6.86 mm ³	PEEK
B-RP-301008-PK-NA	1/4-28 UNF & 10-32 UNF (*2)	0.8 mm	4.40 mm ³	PEEK
B-RP-301009-PK-NA	1/4-28 UNF & 10-32 UNF (*2)	1.25 mm	10.67 mm ³	PEEK
B-RP-301010-PK-NA	1/4-28 UNF (*2) & 10-32 UNF	0.8 mm	5.94 mm ³	PEEK
B-RP-301011-PK-NA	1/4-28 UNF (*2) & 10-32 UNF	1.25 mm	14.48 mm ³	PEEK
B-RP-301012-PK-NA	1/4-28 UNF & 10-32 UNF (*2)	0.8 mm	4.40 mm ³	PEEK
B-RP-301013-PK-NA	1/4-28 UNF & 10-32 UNF (*2)	1.25 mm	10.68 mm ³	PEEK

PEEK FEMALE THREAD Y-ADAPTER

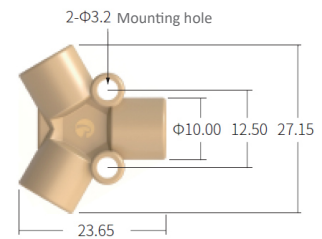
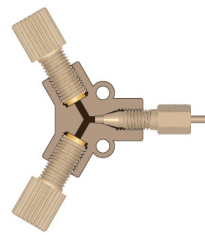
Thread 1/4-28 UNF | 10-32 UNF



- Connecting three fittings with the same or different threads together.
- Designed to separate a fluid or mix two fluids together.
- Y-connection geometry reduces turbulence and baseline noise, increasing sensitivity and improving analysis results.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

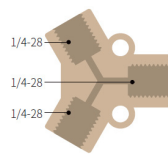
Application Note

Unit: mm

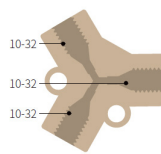


8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread

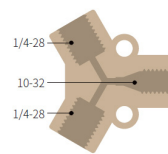
PEEK Female Thread Y-Adapter



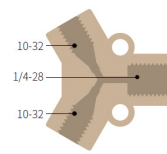
B-RP-303001-PK-NA
B-RP-303002-PK-NA
B-RP-303003-PK-NA



B-RP-303004-PK-NA
B-RP-303005-PK-NA



B-RP-301006-PK-NA
B-RP-301007-PK-NA

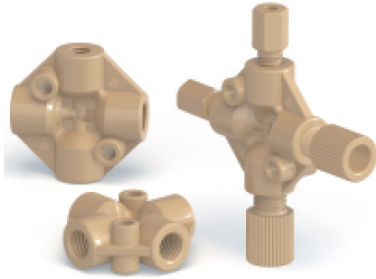


B-RP-303008-PK-NA
B-RP-303009-PK-NA

Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-303001-PK-NA	1/4-28 UNF(*3)	0.8 mm	7.39 mm ³	PEEK
B-RP-303002-PK-NA	1/4-28 UNF(*3)	1.25 mm	18.13 mm ³	PEEK
B-RP-303003-PK-NA	1/4-28 UNF(*3)	2.0 mm	44.81. mm ³	PEEK
B-RP-303004-PK-NA	10-32 UNF(*3)	0.8 mm	2.78 mm ³	PEEK
B-RP-303005-PK-NA	10-32 UNF(*3)	1.25 mm	6.68 mm ³	PEEK
B-RP-303006-PK-NA	1/4-28 UNF(*2) & 10-32 UNF	0.8 mm	5.85 mm ³	PEEK
B-RP-303007-PK-NA	1/4-28 UNF(*2) & 10-32 UNF	1.25 mm	14.31 mm ³	PEEK
B-RP-303008-PK-NA	1/4-28 UNF & 10-32 UNF(*2)	0.8 mm	4.42 mm ³	PEEK
B-RP-303009-PK-NA	1/4-28 UNF & 10-32 UNF(*2)	1.25 mm	10.5 mm ³	PEEK

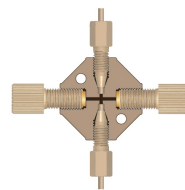
PEEK FEMALE THREAD CROSS ADAPTER

Thread 1/4-28 UNF | 10-32 UNF

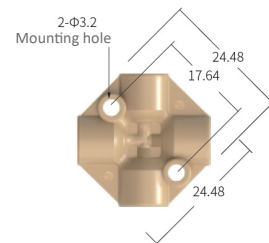


- Connecting four fittings with the same or different threads together.
- Designed to separate a fluid or mix two fluids together.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

Application Note

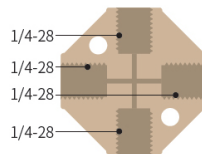


8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread

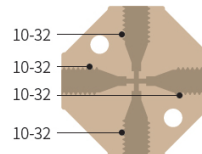


Unit: mm

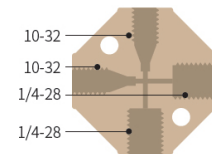
PEEK Female Thread Cross Adapter



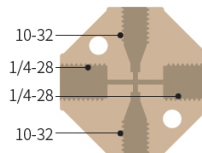
B-RP-306001-PK-NA
B-RP-306002-PK-NA
B-RP-306003-PK-NA



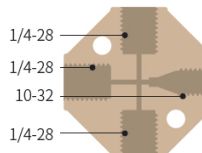
B-RP-306004-PK-NA
B-RP-306005-PK-NA



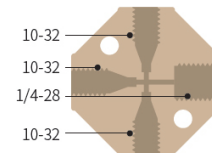
B-RP-306006-PK-NA
B-RP-306007-PK-NA



B-RP-306008-PK-NA
B-RP-306009-PK-NA



B-RP-306010-PK-NA
B-RP-306011-PK-NA



B-RP-306012-PK-NA
B-RP-306013-PK-NA

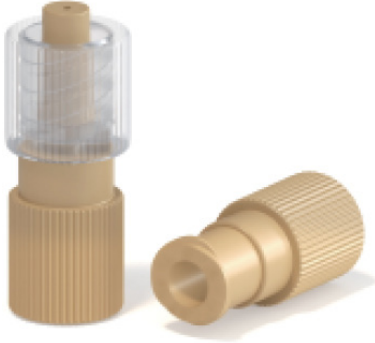
Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-306001-PK-NA	1/4-28 UNF (*4)	0.8 mm	9.21 mm ³	PEEK
B-RP-306002-PK-NA	1/4-28 UNF (*4)	1.25 mm	22.36 mm ³	PEEK
B-RP-306003-PK-NA	1/4-28 UNF (*4)	2.0 mm	54.36 mm ³	PEEK
B-RP-306004-PK-NA	10-32 UNF (*4)	0.8 mm	3.05 mm ³	PEEK
B-RP-306005-PK-NA	10-32 UNF (*4)	1.25 mm	7.07 mm ³	PEEK
B-RP-306006-PK-NA	1/4-28 UNF (*2) & 10-32 UNF (*2)	0.8 mm	6.13 mm ³	PEEK
B-RP-306007-PK-NA	1/4-28 UNF (*2) & 10-32 UNF (*2)	1.25 mm	14.73 mm ³	PEEK
B-RP-306008-PK-NA	1/4-28 UNF (*2) & 10-32 UNF (*2)	0.8 mm	6.13 mm ³	PEEK
B-RP-306009-PK-NA	1/4-28 UNF (*2) & 10-32 UNF (*2)	1.25 mm	14.49 mm ³	PEEK
B-RP-306010-PK-NA	1/4-28 UNF (*3) & 10-32 UNF	0.8 mm	7.67 mm ³	PEEK
B-RP-306011-PK-NA	1/4-28 UNF (*3) & 10-32 UNF	1.25 mm	18.26 mm ³	PEEK
B-RP-306012-PK-NA	1/4-28 UNF & 10-32 UNF (*3)	0.8 mm	4.60 mm ³	PEEK
B-RP-306013-PK-NA	1/4-28 UNF & 10-32 UNF (*3)	1.25 mm	10.75 mm ³	PEEK

PEEK FEMALE THREAD LUER ADAPTER

Thread 1/4-28 UNF | 10-32 UNF

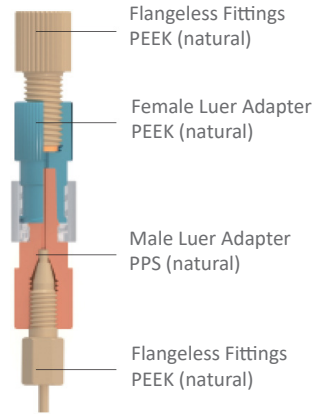
01

PEEK FITTINGS



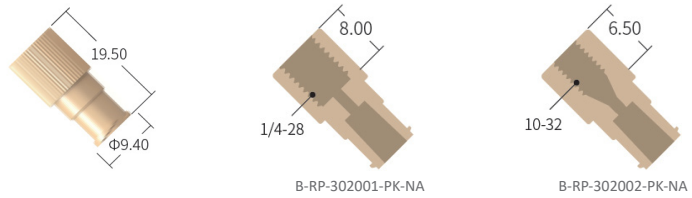
- Designed to connect Luer-Adapters to 10-32 UNF or 1/4-28 UNF threaded ports.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

Application Note



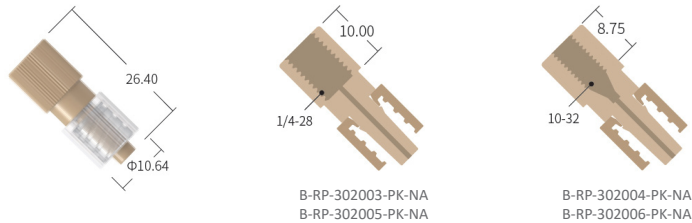
PEEK Female Luer Adapter

Unit: mm



PEEK Male Luer Adapter

Unit: mm



Product No.	Thread	Channel Diameter	Pressure Rating	Material
B-RP-302001-PK-NA	1/4-28 UNF	•	4 bar (58 psi)	PEEK
B-RP-302002-PK-NA	10-32 UNF	•	4 bar (58 psi)	PEEK
B-RP-302003-PK-NA	1/4-28 UNF	0.8 mm	•	PEEK+PP
B-RP-302005-PK-NA	1/4-28 UNF	1.2 mm	•	PEEK+PP
B-RP-302004-PK-NA	10-32 UNF	0.8 mm	•	PEEK+PP
B-RP-302006-PK-NA	10-32 UNF	1.2 mm	•	PEEK+PP

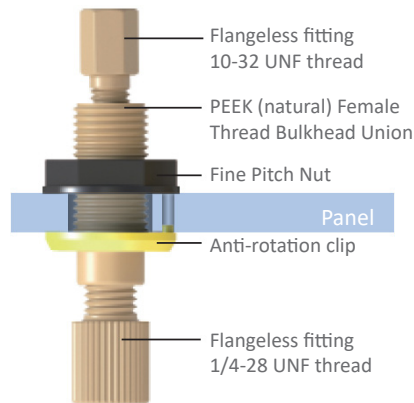
PEEK FEMALE THREAD BULKHEAD UNION

Thread 1/4-28 UNF | 10-32 UNF



- Designed to pass through the device front panel and connect the internal tubing to the outside.
- Through-panel union with male thread M10*1, PPS nut and PP anti-rotation clip.
- Consider using distinct colors to enhance differentiation.
- Long-term working temperature range: -100°C ~ +250°C.
- Thread: 10-32 UNF coned, 1/4-28 UNF flat bottom.

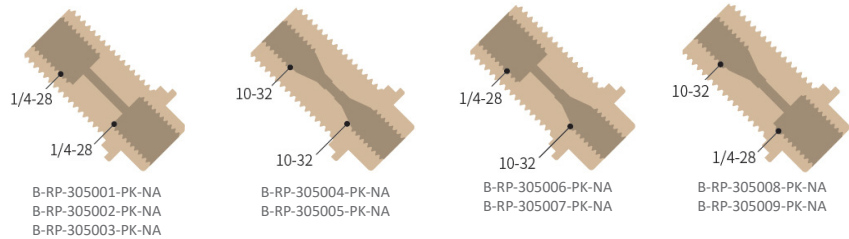
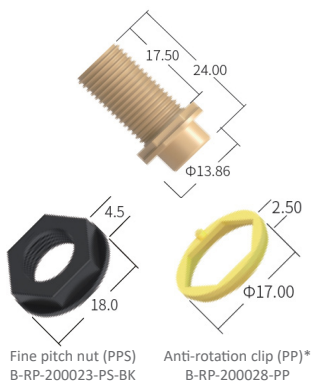
Application Note



8 mm 1/4-28 UNF female thread
6.5 mm 10-32 UNF female thread

Unit: mm

PEEK Female Thread Bulkhead Union



Product No.	Thread	Channel Diameter	Internal Volume	Material
B-RP-305001-PK-NA	1/4-28 UNF	0.8 mm	4.02 mm ³	PEEK+PPS black+PP
B-RP-305002-PK-NA	1/4-28 UNF	1.25 mm	9.98 mm ³	PEEK+PPS black+PP
B-RP-305003-PK-NA	1/4-28 UNF	2.0 mm	25.13 mm ³	PEEK+PPS black+PP
B-RP-305004-PK-NA	10-32 UNF	0.8 mm	0.94 mm ³	PEEK+PPS black+PP
B-RP-305005-PK-NA	10-32 UNF	1.25 mm	2.33 mm ³	PEEK+PPS black+PP
B-RP-305006-PK-NA	1/4-28 UNF & 10-32 UNF	0.8 mm	2.48 mm ³	PEEK+PPS black+PP
B-RP-305007-PK-NA	1/4-28 UNF & 10-32 UNF	1.25 mm	6.16 mm ³	PEEK+PPS black+PP
B-RP-305008-PK-NA	1/4-28 UNF & 10-32 UNF	0.8 mm	2.48 mm ³	PEEK+PPS black+PP
B-RP-305009-PK-NA	1/4-28 UNF & 10-32 UNF	1.25 mm	6.16 mm ³	PEEK+PPS black+PP

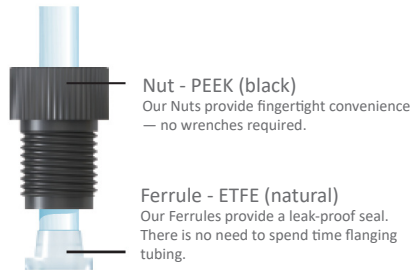
*Different colors of anti-rotation clips on request

PEEK BIG BORE FLANGELESS FITTINGS - TWO-PIECE SET

Thread 5/16-24 UNF, 1/2-20 UNF



- Standard fittings with straight threads, which are tool-free and durable.
- Simply slip the nut and ferrule on the tube, screwing them into the tube.
- Need to use with ETFE ferrule.
- Long-term working temperature range: -80°C ~ +150°C.
- Used for standard rigid tubing OD 4.8/6.4 mm, easy and fast installation.
- Thread: 5/16-24 UNF, 1/2-20 UNF.



- Make sure the locking ring is oriented correctly! The flattened end of the ring should face towards the nut with the narrow end of the ferrule towards the ring.

Application Note

Step 1. Slide the PEEK nut, followed by the ETFE ferrule, at least 3/16" (4.7625 mm) from the end of clean cut tubing.

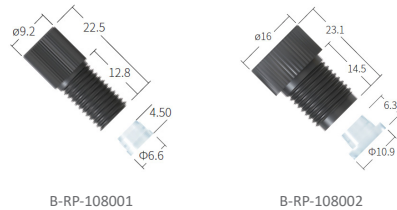
Step 3. Finger tighten the fittings into the port until snug.

Step 2. Insert the assembly into the receiving port, pushing the tubing into the port until it bottoms out.

Step 4. After several uses (especially at high pressure) the ferrules should be replaced.

PEEK Big Bore Flangeless Fittings Two-piece set

Unit: mm



Product No.	Thread	Tubing Size O.D.	Pull-off Strength	Pressure Rating	Material
B-RP-108001	5/16-24 UNF	4.8 mm	7.27 kg	39.6 bar (574 psi)	PEEK+ETFE
B-RP-108002	1/2-20 UNF	6.4 mm	11.89 kgf	30.6 bar (443 psi)	PEEK+ETFE